#### **Easy Grant ID 1966 Executive Summary**

Texas has by far the largest rural population in the United States, as well as a highly diverse and rapidly growing citizenry. Texas also has well-educated population centers boasting a vibrant high tech industry, resulting in arguably the nation's most significant digital divide. WCX, who is partnering with the University of Texas at Austin and their proposed TOPP middle-mile project, will attack this problem in 11 specific rural areas which are the target of this application. We have directly partnered with several unserved cities/communities and will extend the middle mile solution being created by the University of Texas and USFon inc., to the homes of the unserved population in this application. As can been seen throughout this application we have worked to directly include community leaders, schools, medical facilities, community centers.

#### **Team**

WCX is lead by Lowell Feldman who is also a valued member of the University of Texas faculty. In addition to being a Communications and Technology Law Professor, Dr. Feldman has over 15 years of experience in building and operating communications companies and is also the Chairman of the innovative non-profit provider called USFon -- a company started by his students 3 years ago. Dr. Feldman was the founder and CEO of what is now Alpheus Communications and pioneered the use of DWDM gear in the state of Texas. His vision led to what is now a healthy alternative broadband provider which is focused on major urban markets in Texas.

Brian DeHaven is the Operations Manager, with over 9 years of telecommunications industry experience, particularly with small telecommunications companies serving rural Texas.

Vice President of Engineering, Soren Telfer has over 10 years experience building complex hardware and software systems and has spent the last 5 years developing communications protocols, communications software, applications and hardware.

Rich Lewis is the Chief Financial Officer, with over 20 years experience in finance and accounting.

WCX is also backed by Main Street Mezzanine which is a publicly traded banking company on NASDAQ under the ticker MAIN.

While our BIP project does not require the need for WCX to grow the current \$2 Million revolving facility we have with MAIN, we invite conversations with MAIN to discuss their confidence in our team and in our ability to execute. In the event that we are not funded by BIP and instead receive grants from BTOP, MAIN has offered to increase its credit line under its current loan agreement as described in the financial section of this application to meet the match criteria. Importantly we also view the communities as a valuable member of our team.

To date WCX's Parent has raised \$2,658,706 in equity much of which was used to acquire the CMA 667 B- Block license from FCC Auction 73. This spectrum will be used to provide service to these markets. WCX will deploy a Motorola based LTE system to these markets. In working with various community leaders in the area including representatives from electric cooperatives and the LCRA, our team has built momentum from their enthusiasm and we stand ready to serve their pressing needs to join the digital world.

# **Technical Solution and Innovation**

Given the desire to develop innovative solutions that will decrease in cost over time and be well-adapted to rural settings, we have decided to initially partner with Motorola for a majority of our LTE/4G equipment. More importantly we will endeavor to create direct fiber connections to the core towers we will use in service delivery. We also expect significant advances in vendor equipment in the near term and will not hesitate to partner with additional vendors once their equipment has been field tested.

The key technical aspects of our solution are a leverage our 700 MHZ License and the developing 4G wireless broadband standards. The residential fixed and mobile service will provided in various small form-factor CPE that can either be a handset, a USB dongle or even a fixed CPE devise. Peak data rates are forecasted at well over 20 meg, with our initial service operating at 8 Mbps down and 2 Mbps up. Mobile and fixed voice service will also be provided with full interoperation with emergency and law enforcement services.

#### **COMMUNITY NEED**

These 11 specific communities were targeted based upon an initial study and the fact that the community leaders and existing electric service providers targeted these communities as not having broadband access. In our follow up field work we verified that the lack of broadband infrastructure and available retail service has a daily affect on the ability for these community members to partake in our information society. This is evidenced by our research in identifying and studying these locations.

## **Open Access**

WCX will be operated with clear open access guidelines in terms of making connections, daily operations, and non-discrimination of packets. We will strive to exceed the standards of openness set by the FCC, and set the bar in the broadband industry for fairness and transparency. We will peer with USFon and the University of Texas as well as the Texas medical network THINC so that rural medical and educational operate as intended.

## **Promoting competition**

Our goal is to clearly deliver superior services and gain market share. This said, one of our partners is also a potential competitor,

By both of us working with the community leaders we realized that upgrading their existing network and combining it with our new infrastructure can best serve the community.

Since WCX is a CMRS certified ETC and ETP in the State of Texas PUC, our network requirements our more rigorous and we will ensure that 911 and back-up power is engineered.

We will also solicit non-profit Anchor Community Partners who we will connect via fiber fed services as a Middle-Mile solution. WCX will charge \$500 per month for such fiber based connections. All legal use will be encouraged, including potential uses that can compete for retails services. This overt open policy can encourage multiple providers of broadband and anchor use. Maximum rural penetration and sustainability. Understanding the balance between the costs of building infrastructure and reaching the greatest number of people possible is key to successful implementation and sustainability. To maximize rural penetration, we utilize our extensive knowledge of fiber and wireless technologies to create a sustainable rural service model. WCX relies on our existing status as a Certified ETC and ETP in Texas, and our existing ability to provide CMRS phone services. In essence we have already signed the social contract to provide certain services at rates that are determined to be in the public interest – and we intend to honor this contract with respect to our broadband services as well. Please review our affordability statement where we voluntarily provide Broadband Discounts to users who also qualify for low income support for voice services.

### THE BOTTOM LINE

Collectively this project will:

- directly employ 26 people for operations;
- will employ 25 people through sub-contract during the build-out phase;
- make broadband service available to 29,000 people and 12,343 households in current unserved locations which in turn can help provide job opportunities to these people including competitive communications businesses;
- provide 4,306 retail broadband connections to these areas;
- provide 33 fiber based middle mile connections to these areas;
- invest \$11,063,180 into infrastructure in these areas:
- coordinate and directly peer with the University of Texas and the Texas Health Information Network Consortium to deliver health and educational opportunities to these rural areas;

This project also has received the support of the community and has the financial ability and expertise to deliver.